



In the Claims:

Clean Copy of Claims as Amended

Please cancel Claims 57-65.  
Please amend Claims 32-56 as follows.

sub D1  
C1  
26. (Amended) A method of treating prostate cancer comprising administration of a composition comprising mycobacterial DNA (B-DNA) and a pharmaceutically acceptable carrier to an animal or human having prostate cancer in an amount effective to have an antineoplastic effect on prostate cancer in the animal or human having the prostate cancer.

27. (Amended) The method of Claim 26, wherein the mycobacterial DNA is obtained from *M. smegmatis*, *M. kansaii*, *M. fortuitum*, *M. tuberculosis*, *M. bovis*, *M. vaccae*, *M. avium* or *M. phlei*.

28. (Amended) The method of Claim 26, wherein the mycobacterial DNA (B-DNA) is obtained from *M. phlei*.

29. (Amended) The method of Claim 26, wherein the pharmaceutically acceptable carrier is mycobacterial cell wall (BCC).

30. (Amended) The method of Claim 29, wherein the mycobacterial DNA (B-DNA) is preserved and complexed on the mycobacterial cell wall (BCC).

31. (Amended) The method of Claim 26, wherein the pharmaceutically acceptable carrier is *M. phlei* cell wall (MCC).

32. (Amended) The method of Claim 31, wherein *M. phlei* DNA is preserved and complexed on the *M. phlei* cell wall (MCC).

C<sub>1</sub>  
cont  
33. (Amended) The method of Claim 26, wherein the prostate cancer is hormone-sensitive prostate cancer.

34. (Amended) The method of Claim 33, wherein the hormone is an androgen.

35. (Amended) The method of Claim 34, wherein the androgen is testosterone.

Sub  
D2  
36. (Amended) The method of Claim 26, wherein the antineoplastic effect is inhibition of proliferation of cancer cells in the prostate, induction of apoptosis in the cancer cells in the prostate, induction of cytokine synthesis in the cancer cells in the prostate, or induction of cytokine synthesis by immune system cells in the prostate.

37. (Amended) The method of Claim 36, wherein the cytokine is IL-12 or TNF- $\alpha$ .

38. (Amended) The method of Claim 26, wherein the pharmaceutically acceptable carrier is a solid carrier, a liquid carrier, or combination of a solid and liquid carrier.

39. (Amended) The method of Claim 26, further comprising administration of anti-androgenic agents, chemotherapeutic agents, steroids, or immunological agents.

Sub D3  
and

40. (Amended) A method of treating prostate cancer comprising administration of a composition comprising mycobacterial DNA (B-DNA) preserved and complexed on mycobacterial cell wall (BCC) and a pharmaceutically acceptable carrier to an animal or human having prostate cancer in an amount effective to have an antineoplastic effect on prostate cancer in the animal or human having the prostate cancer.

41. (Amended) The method of Claim 40, wherein the mycobacterial DNA is obtained from *M. smegmatis*, *M. kansaii*, *M. fortuitum*, *M. tuberculosis*, *M. bovis*, *M. vaccae*, *M. avium* or *M. phlei*.

42. (Amended) The method of Claim 40, wherein the mycobacterial DNA is obtained from *M. phlei*.

43. (Amended) The method of Claim 40, wherein the mycobacterial cell wall is *M. phlei* cell wall (MCC).

44. (Amended) The method of Claim 40, wherein the prostate cancer is hormone-sensitive prostate cancer.

45. (Amended) The method of Claim 44, wherein the hormone is an androgen.

46. (Amended) The method of Claim 45, wherein the androgen is testosterone.

47. (Amended) The method of Claim 40, wherein the antineoplastic effect is inhibition of proliferation of cancer cells in the prostate, induction of apoptosis in

cancer cells in the prostate, induction of cytokine synthesis by cancer cells in the prostate, or induction of cytokine synthesis by immune system cells in the prostate.

C 1 sub 804  
cont.

48. (Amended) The method of Claim 47, wherein the cytokine is IL-12 or TNF- $\alpha$ .

49. (Amended) The method of Claim 40, wherein the pharmaceutically acceptable carrier is a solid carrier, a liquid carrier, or a combination of a solid and liquid carrier.

50. (Amended) The method of Claim 40, further comprising administration of anti-androgenic agents, chemotherapeutic agents, steroids, or immunological agents.

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